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ABSTRACT

Enrollment in institutions of higher education in Indiana has been leveling off since 1970. This is mainly due to: (1) an expansion of technical and vocational education programs; (2) increases in tuition; (3) reduced federal support and high interest rates on borrowed money; (4) a general disillusionment with a college education on the part of the young; and (5) fear of campus riots on the part of the parents. The overall effect may be a diminution in the number of 18-year-olds enrolled in Indiana's public and private colleges and universities. This report discusses and presents tabular information on: (1) statewide enrollment trends as related to births in the years of 1944 through 1952; (2) institutional trends between 1967 and 1970 in (a) public, (b) private liberal arts, (c) special private, and (d) other institutions of higher education; (3) new policy developments affecting enrollment; and (4) enrollment projections. (AF)

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STATEWIDE ENROLLMENT PATTERNS:
HIGHER EDUCATIONAL OPPORTUNITIES IN INDIANA

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Statewide Enrollment Patterns:
Higher Educational Opportunities in Indiana

John S. Waggaman

A. Enrollment Policies and Problems

A major concern of legislators and educators these past few years has been that of educational opportunity. The Indiana Superintendent of Public Instruction (and his predecessors) along with business and industry representatives have been pushing hard for more vocational and technical programs and institutions. Although there has been vociferous disagreement between the Superintendent and the business groups about the best way (i.e., community colleges v. an expanded IVTC) to reach this goal, there is little disagreement about the goal itself.

In contrast to this emphasis on vocational education is that presented by the faculty and administrators of Indiana's public universities; they decided to meet the enrollment demand resulting from the post-World War II baby boom by more than doubling their student capacity since 1960 in the traditional academic programs. Only recently has the need for new programs become a major concern. A keystone in the purpose of the state universities and land-grant colleges--throughout the United States--is provision of broad educational opportunities for the many who can qualify, which has necessitated the recent introduction of general and technical programs at these universities and encouragement of the growth of the regional campus system. By this means, most higher education officials in Indiana's public universities believe the major demand for vocational and technical educational opportunity can be met. They believe strongly that a diversion of existing state resources to construct a community college system would irreparably damage the existing first-rate public institutions in the state. Interestingly enough, the Indiana General Assembly, through the appropriation process, has supported an expansion of technical and regional campus programs.

Another enrollment issue facing Indiana's institutions of higher education, both public and private, is that of tuition fees. Many of Indiana's private universities and colleges have made explicit decisions to limit enrollments and thereby maintain a full measure of control over their institutional destinies. Although Indiana has a small state scholarship program which also benefits students who attend private colleges, the private institutions receive little government support; however, many of the private colleges have participated in the federally sponsored Higher Education Facilities Act. As a consequence of rising costs and

heavy reliance on tuition for their general education budget, the apparent result has been a reduction in enrollments. The same thing happened at the state universities when they found it necessary to raise tuition fees in 1969 as a result of a less-than-usual increase in State appropriations. Thus, both public and private institutions have found it necessary to raise tuition in order to maintain the quality of their educational programs. It is a terrible irony that, at a time when some of the most beneficial and far-reaching changes in higher education are taking place, public support via appropriations is dwindling (i.e., increasing at a decreasing rate) and no public assistance for the private institutions is on the horizon. This decrease in public support may lead to declining educational opportunities.

Another problem besetting higher education institutions is that of enrollments, which are being held or slowed down by numerous factors, one being the high cost of tuition. Other factors are: (1) the use of college as a draft haven has declined with the winding down of the Vietnam War and the new lottery draft system; (2) the declining economy has cut off summer employment and part-time jobs; (3) reduced federal support and high interest rates have scared off or prevented borrowing; (4) desire for other kinds of learning or sensory experiences and a growing disenchantment with the bad effects of technology are shifting some young adults away from the traditional intellectual-cognitive college experience; and (5) fears of campus riots and disturbances have turned away some students and caused some parents to discourage the enrollment of their children.

The consequences of these factors can be extremely varied, leading to indefinite postponement of enrollment; deferment of college entrance to a later age; increasing part-time enrollments; alternating periods of classes and work experience; or telescoping of time to obtain a degree in three years. To keep down costs, more students may shift to the regional campuses for their entire program or for either the lower or upper division courses. There is fragmentary evidence to indicate students are deserting the main residential campuses for the home-site regional campuses. The overall consequence may be a diminution in the number of 18-year-olds enrolled in Indiana's public and private colleges and universities.

B. Statewide Trends

To evaluate the trend in freshmen enrollments at Indiana's higher education institutions, data have been obtained from the annual statewide report compiled by N.M. Parkhurst and T.N. Gunderson. The enrollment data given in this report coincide with those in government reports. However, the enrollments listed in-

clude both full and part-time students and make no distinction between residents and nonresidents of the State. These characteristics make certain kinds of analysis somewhat hazardous, but for limited purposes the data are acceptable. The statewide data cover the 1960s, when enrollments grew rapidly, and are provided in Table I below. Also included in this table are Indiana registered births 18 years preceding enrollment and the ratio of enrollment to births. The latter is an attendance ratio, which is very useful in projecting enrollments and provides an important index of educational opportunity. Analysis of enrollment data with this ratio is discussed in the 1962 Report of the Indiana Post-High School Education Study Commission and in the Parkhurst and Suddarth publications that project enrollments, as discussed below in Section E.

The continuing rise of the attendance ratio to 1970 indicates that freshmen enrollments have been increasing at a more rapid rate than births 18 years earlier. However, the lack of increase in this ratio for 1970, even when the increase in births had been much larger in 1952 than earlier, points to an unusual condition. Recent reports in newspapers, magazines and professional publications indicate applications for the 1971 freshman class are off 2 to 27 percent. In other words, the percent of 18-year-olds attending college may have reached its peak in 1969 and 1970.

C. Institutional Trends

The changes in freshman enrollment for the most recent years deserve particular attention because of the multiplicity of countervailing forces affecting attendance. With the increasing tempo of the Vietnam War, it can be seen that a large increase in college attendance occurred in 1968, but then the trend returned to the expected rate thereafter. The year 1968 included a United States presidential election, a peak in number of Vietnam casualties and the largest draft calls of the war. Although the private colleges had been regularly increasing fees prior to this period, the public universities had not and this also made college attendance a feasible choice for many. It might be said that the push of the Vietnam draft and the pull of available opportunity produced an unusually large enrollment in the Fall of 1968.

To examine this phenomenon in detail, freshmen enrollments for each Indiana college and university were examined, classified and growth rates computed. Table II classifies the actual freshmen enrollments and Table III presents the growth rates for the various groups of institutions. Table IV illustrates the changing proportion of freshmen enrollments among the various classes of institutions.

Table I
 INDIANA BIRTHS AND FRESHMEN ENROLLMENT IN ALL
 HIGHER EDUCATION INSTITUTIONS IN THE STATE^a

Registered Births ^b		Freshmen ^c		Attendance Rates
Year	Number	Year	Number	
1944	71,354	1962	32,172	45.1
1945	68,444	1963	33,608	49.1
1946	85,515	1964	37,884	44.3
1947	95,758	1965	45,409	47.4
1948	92,131	1966	44,212	48.0
1949	93,949	1967	47,582	50.6
1950	93,256	1968	50,535	54.2
1951	101,099	1969	52,741	52.2
1952	104,469	1970	54,533	52.2

Notes and Sources:

- a. Includes students in Indiana's public and private colleges and universities.
- b. Indiana State Board of Health; data probably should be considered accurate within ± 3 percent. See Parkhurst and Suddarth (1968) for amounts that can be added and subtracted; note that they make no adjustments for interstate migration.
- c. Parkhurst and Gunderson; includes anyone who is reported by the institution as a student, whether full or part time, from in or outside the State of Indiana. Note that Indiana residents attending college out of state are not included.

Table II
FRESHMEN ENROLLMENTS AT INDIANA
COLLEGES AND UNIVERSITIES

Institutions By Categories	Fall Semester			
	1967	1968	1969	1970
A. <u>Public</u>	<u>34,219</u>	<u>36,652</u>	<u>38,015</u>	<u>39,409</u>
1. Main campuses	20,183	21,253	21,865	21,866
2. Regional campuses	14,036	15,399	16,150	17,543
B. <u>Private Liberal Arts</u>	<u>10,884</u>	<u>11,203</u>	<u>11,542</u>	<u>11,646</u>
3. Large--universities	5,217	5,049	5,355	5,252
4. Medium--colleges	4,438	4,895	4,833	5,075
5. Small--colleges	1,229	1,259	1,354	1,319
C. <u>Special Private</u>	<u>2,311</u>	<u>2,496</u>	<u>2,350</u>	<u>2,450</u>
6. Catholic Girls' Colleges	799	947	939	899
7. Engineering & Tech. Institutions	1,334	1,371	1,250	1,398
8. Religion College	178	178	161	153
D. <u>Other Unclassified*</u>	<u>168</u>	<u>184</u>	<u>834</u>	<u>1,028</u>
E. STATE TOTAL	<u>47,582</u>	<u>50,535</u>	<u>52,741</u>	<u>54,533</u>

Note: * Included 5 seminaries, 2 junior colleges and 2 institutes in 1970 not classifiable below.

Source: Parkhurst and Gunderson.

Key to Institutional Classification:

1. Ball State, Indiana State, Indiana and Purdue (4 institutions and 4 campuses).
2. Indianapolis; Evansville, Fort Wayne, Kokomo, Northwest, South Bend and Southeast; Calumet, Fort Wayne, North Central, Southern; and Jasper (4 institutions, 12 campuses and 1 center).
3. Butler, DePauw, Evansville, Notre Dame and Valparaiso (5 institutions, 1 center).
4. Anderson, Earlham, East Indiana, Goshen, Hanover, Indiana Central, Manchester, Marian, St. Joseph, Calumet, Taylor and Wabash (10 institutions and 2 centers).
5. Bethel, Franklin, Grace, Huntington, Marion and Oakland City (6 institutions).
6. St. Benedict, St. Francis, St. Mary-of-the-Woods and St. Mary's (4 institutions to 1970 when St. Benedict disbanded).
7. Indiana Institute of Technology, Rose-Hulman Polytechnic Institute and Tri-State College (3 institutions).
8. Fort Wayne Bible College.

Table III
ANNUAL PERCENT CHANGE IN FRESHMEN ENROLLMENTS

Institutions By Categories	Years		
	1967-1968	1968-1969	1969-1970
A. <u>Public</u>	+ 7.5	+3.7	+ 3.7
1. Main campuses	+ 5.3	+2.9	+ 0.0
2. Regional campuses	+ 9.7	+4.9	+ 8.6
B. <u>Private Liberal Arts</u>	+ 2.9	+3.0	+ 0.9
3. Large--universities	- 3.3	+6.1	- 1.9
4. Medium--colleges	+10.3	-1.3	+ 5.0
5. Small--colleges	+ 2.4	+7.5	- 2.6
C. <u>Special Private</u>	+ 8.0	-6.0	+ 4.3
6. Catholic Girls' Colleges	+21.4	+6.9	+ 0.1
7. Engineering & Tech. Institutions	+ 2.8	-8.8	+11.8
8. Religion College	= 0.0	-9.6	- 5.0
D. (Not applicable)			
E. STATE TOTAL	+ 6.2	+4.4	+ 3.4

Source: Table II

Table IV
INSTITUTIONAL SHARES OF FRESHMEN ENROLLMENTS

Institutions By Categories	Years			
	1967	1968	1969	1970
A. <u>Public</u>	71.9%	72.5%	72.1%	72.3%
1. Main campuses	42.4	42.1	41.5	40.1
2. Regional campuses	29.5	30.4	30.6	32.2
<u>All Private Institutions</u>	28.1	27.5	27.9	27.7
B. Private Liberal Arts Colleges and Universities	22.9	22.2	21.9	21.4
C. Special Private Institutions	4.9	4.9	4.5	4.5
D. Unclassified	0.3	0.4	1.5	1.8
	100.0%	100.0%	100.0%	100.0%

Source: Table II

The high growth rates for freshmen enrollments between 1967 and 1968 as compared to the following years are demonstrated in Table III. The 1968 surge in enrollment was not expected, given the level of births 18 years earlier, which is almost identical to the number 19 years earlier (see Table I, birth years 1949 and 1950). Between 1967 and 1968 the public institutions increased by 2400 freshmen with almost 1400 of them enrolling at regional campuses. The fee increases at all of the public institutions in 1969 may have helped dampen enrollments in that year.

The largest increase of freshmen between 1967 and 1968 at the private institutions occurred at the medium-size colleges. This group increased by 450 students in contrast with the large private universities, which decreased by almost 170 freshmen. As will be noted in the Key to Institutional Classification in Table II, the medium-size private colleges include East Indiana Center, then hosted by Earlham College. It is now a regional campus of Indiana University; its enrollment in this earlier period grew from 393 in 1967 to 616 freshmen in 1968, a 56.7 increase. If this quasi-public campus is removed from the medium-size group then the real rate of increase 1967-68 becomes +5.7 percent. The East Indiana Center returned to its 1967 enrollment level in 1969 and then increased by 35.3 percent between 1969 and 1970. This up-down-up pattern is the same at the other regional campuses, as indicated in Table III.

The fact that the most rapid growth in freshmen enrollments is occurring at the regional campuses is quite evident in Table III. This expansion is further indicated in Table IV, showing that about 72 percent of the freshmen enrolled in all of Indiana's colleges and universities attend public institutions. The surge of enrollments in 1968 raised this amount one-half point. One might speculate that a continuation of high combat death rates in Vietnam and a concomitantly high series of monthly draft quotas might have driven even more students to the college draft-haven. Similarly, such a large number of alienated youth on the public campuses might have shifted the enrollment shares to as high as 80 percent public, assuming, of course, these new students did not cripple or stifle the functioning of the higher educational system. One might also speculate that the influx of some of the draft-avoiders on campus may have been responsible for some of the violent action which has taken place. If this is true, it could also be the case that most of the alienated student group has either dropped out or been socialized into the system by now, thereby providing much of the calm on the campus in 1970-71.

Aside from these speculations are the limited data about regional college attendance patterns. These data say much about educational opportunities taken advantage of and those not available.

According to a study by Elliott (1969), Indiana's private colleges and universities enrolled 15 percent of all freshmen who were residents of Indiana (including both private and public institution enrollments). Of all the freshmen enrolled at private colleges; only 44 percent are residents of Indiana. Conversely, 85 percent of all resident freshmen are enrolled on the public campuses and 90 percent of the freshmen classes there are residents of the State. An important question here is whether the private colleges are "losing" students to the public campuses because their tuition and fees are too high. Or, as Table IV suggests, is there a decline in the share of enrollments at the public main campuses and the private liberal arts colleges because of their residential (versus commuter campus) character and costs? The decline in enrollment opportunity, presumably because of high student costs, at both kinds of institutions means a distinct loss to prospective students and the State.

Since the Fall of 1968 may have been a time of unusual enrollment activity, it is fortunate to have the results of Elliott's 1968 freshman census, which contains some of the most important data available on the topic of educational opportunity. In brief, Elliott shows that the 9 counties containing one or more public regional campuses had 61.7 percent of their high school graduates enrolled in college. Next highest (at 55.6 percent) were the 5 counties which contained a public main campus. After these two groups came a drop to 46.7 percent attendance for the 16 counties containing one or more private institutions, and then 45.8 percent for the remaining 62 counties in Indiana. One can easily and correctly conclude that the public regional campuses are placed where they can reach the college attending population.

When attendance rates are classified by urban and rural categories, another hierarchy is obtained. The 23 counties within Indiana's Standard Metropolitan Statistical Areas (SMSA) averaged 57.5 percent college attendance for high school graduates. The six counties with a city of 25,000 or larger (not in an SMSA) had 53.9 percent enrolled. The fifteen counties with cities of 10,000-25,000 size (not in an SMSA) averaged 48.1 percent. The overall urban average for the three preceding groups of counties was 55.8 percent.

In contrast to the high urban rates of college attendance are those for high school graduates from rural counties. The 46 rural counties averaged 43.3 percent, with those north of Indianapolis averaging 46.8 percent and those south averaging 39.3 percent. To say the least, it seems that life opportunities are somewhat limited if one graduates from a high school in the pastoral countryside, unless it happens to be a suburban county in an SMSA.

D. New Policy Developments

Educational opportunities of the past and present have been indicated above. The recent activity of the Indiana General Assembly in early 1971 undoubtedly will lead to public policy decisions which will have an additional impact on higher education. The granting of greater autonomy to Indiana Vocational Technical College (IVTC) similar to that for the existing public institutions plus an increase in its budget should enable a considerable expansion of course and program offerings. The election of a new Superintendent of Public Instruction who wants out of the post-high school vocational education field should also facilitate the full development of IVTC. It is still an open question whether IVTC receives students which would have otherwise attended a regional campus. The development of technical training programs by the State universities may make unnecessary fully accredited two-year community college type vocational programs. IVTC and State universities may provide a flexibility of programming which will outclass the traditional junior college. Or, they might unnecessarily compete.

Another important development is the expanded funding for the Indiana Scholarship program and the granting of authority to it to award students money on the basis of financial need. By raising the maximum allowance or award per student, private colleges and universities are most likely to benefit from the additional funds, although the total impact is not clear. No one seems to know whether the private colleges make the same awards from their own scholarship funds when a student receives a State award or whether they cut back their own spending. In any case, it would still require a substantial grant per private college student to equal the per student appropriation for the public campuses (which varies substantially between campuses). Hopefully, these new monies will enable some students to attend college who might not have otherwise (although no one really knows if this is to be the case). Yet Indiana is still like almost all other states in that it has no special state financial aid program for high-risk inner city youth.

Finally, a major public policy development is the new law creating the state-wide Commission on Higher Education. The Commission has not been organized yet and so is a long way from beginning any programs which could expand educational opportunities. To identify the multiplicity of problems the Commission must face, there is the report, "An Indiana Pattern for Higher Education," and the six status reports and several studies prepared for the Indiana Advisory Commission on Academic Facilities. In addition, the records of the 1970 Legislative Council's special study committee on higher education are available, as are the minutes of

the "informal" coordinating committee created by Governor Edgar Whitcomb in 1969-1970. The latter committee supported a special study of private colleges and universities, prepared by representatives of these institutions, thus providing a first-hand identification of their problems.

To say the days ahead are times of uncertainty and change is only to repeat the obvious. One would find it hard to disagree with Dr. Clark Kerr's remark that one must return to the 1820s to find as uncertain a period for higher education. Exacerbating all of the preceding attempts to expand educational opportunities are the brakes that a limping economy has placed on new and old efforts. With a presidential election coming up in 1972, it is possible these and other issues may receive a new, more sympathetic hearing.

E. Enrollment Projections

With some inkling that fundamental changes may be on their way in both the desire for higher education and the provision of it, enrollment projections have become a necessary game of chance. With the fairly stable relationships experienced in the past, the standard methodology used for these projections has been very good. Whether these conditions still hold should be a point of continuing concern.

As indicated in Table I, the attendance ratio derived from relating freshmen enrollments to births 18 years previous is very useful in projecting enrollments. Since all those who will be enrolling as age-grade freshmen (i.e., enrolling as freshmen at age 18) for the next 18 years are already born, the potential enrollment increases depend entirely upon the percent of the age group who actually enroll. Typically the best way to develop a projection ratio of this kind is to compute it from historical data (or use another institution's experience as an analogue).

This methodology is discussed in detail in the 1962 Report of the Post-High School Education Study Commission. It reported the fitting of a regression line to the 1950-1961 enrollment and earlier birth data; the results indicated an annual increase of 1.51 percentage points. Applying that rate to the births preceding the 1962-1979 enrollments led them to an estimated 74 percent attendance rate in 1979; for a variety of unspecified reasons this rate was too high and was rejected. Returning to an analysis of the actual rates for the period 1930-1961, the Commission arrived at a 1.1 percentage point increase per year.

An analysis of the ratios presented in Table I indicates a 1.0 percent increase would have provided the least amount of deviation from actual enrollments for the period 1962 through 1970. The net differences are presented in Table V. The data

again point out the special character of the 1968 enrollments, which were much larger than a 1.1 annual rate. The 1962 Post-High School Report forecast 45,800 freshmen for 1968 and thereby underestimated by -4,735 or 10.3 percent. Their miss for 1970 was much smaller: 53,600 as against 54,533 actual, a difference of only -933 or 1.7 percent.

Table V

NET DEVIATIONS FROM ACTUAL OF STATEWIDE FRESHMEN ENROLLMENT
PROJECTIONS USING DIFFERENT ANNUAL INCREMENTS
OF INCREASE FOR THE COLLEGE ATTENDANCE RATE

Period of Enrollment Analysis	Annual Percentage Points of Increase				
	0.9	1.0	1.1	1.2	1.5
1962-1970	-10.3	-0.9	+2.4	+5.8	+16.8
1962-1968	-9.6	-2.0	+0.1	+2.2	+8.5
1962-1967	-5.9	+0.9	+2.6	+4.1	+8.6
		Best Fit			

Source: Table I.

On the other hand, Parkhurst and Suddarth (1968) were liberal in their projections and overestimated in 1968, 1969, and 1970; in the latter year the difference was +2274 or 4 percent over. It could be that their formula, Model C₁ (Parkhurst and Suddarth, 1955), is too bound up with history and no longer fits reality; or, their extensively adjusted birth data could be causing problems. (These comments are intended as constructive criticism since Parkhurst is one of the most systematic enrollment analysts in the United States.) The need for change in his procedure is evident since Elliott (1969) followed Parkhurst's 1968 estimates and also overestimated 1969 and 1970 enrollments. Incidentally, the 1968 Report of the State Policy Commission on Post-High School Education gives this whole question short shrift and presents no usable data; this may not have been unexpected since its central achievement was recommending the creation of a Board of Regents.

These misses among the experts raise questions about the methodology and the attendance rate for the 1970 projections and their usefulness for the future. With all of the recent reports that applications for admission of 1971 freshmen are down compared to last year, there is the added complication that even a 1.0 percentage point attendance ratio may be too high. To consider the alternative outcomes from several ratios, Tables VI and VII have been prepared.

Table VI
REGISTERED BIRTHS IN INDIANA

1952	104,469	1962	108,700
1953	105,723	1963	106,956
1954	109,008	1964	105,962
1955	108,430	1965	98,075
1956	113,450	1966	95,658
1957	115,727	1967	93,619
1958	112,486	1968	91,511
1959	112,670	1969	93,700
1960	112,711	1970	98,500
1961	112,208	1971	99,000

Source: Indiana State Board of Health; data for 1969 on are conservative estimates.

As the birth data in Table VI indicate--if you add 18 years to the birth year--1975 should be the peak year for freshmen enrollments. During the next several years enrollment growth may continue, but only if the attendance ratio continues to increase. By 1983 the full fall-off effect should be evident in total undergraduate enrollment, with a continuing decline until around 1988-1990.

The effects of the various attendance rates on projected enrollments for the next 10 years are given in Table VII. Data from the 1962 and 1968 forecasts are also included. With all of the new policy developments, none of these projections may be very reliable beyond or within the next three years.

It is of particular interest here to note the similarities between the current Low projection (with 0.9 percentage point annual increase in the attendance rate) and the 10-year-old projection based on a 1.1 rate. The Low projection began with enrollments in 1962 whereas the series in the 1962 Report begins with 1948. The differences are statistically insignificant. Either of these could serve as useful benchmarks but probably give too much weight to history.

The most optimistic projection seems to be the Model C₁ by Parkhurst and Suddarth. Perhaps it best represents what might have been had we not expanded the Vietnam War, developed a depressed economy, and continued inflation. One need not become maudlin to ask whether United States society may have reached its zenith during the time of the Vietnam War. Our declining commitment to education is an important indicator of this possibility.

Table VII
 ALTERNATIVE FUTURES: PROJECTED FRESHMEN ENROLLMENTS
 AT INDIANA'S PUBLIC AND PRIVATE INSTITUTIONS

	Low ^a 0.9	Best Fit ^b 1.0	Old ^c 1.0	1962 ^d 1.1	1968 ^e Model C1
1971	56,246	57,196	54,447	55,200	59,754
1972	58,897	60,063	57,229	58,300	63,497
1973	59,637	60,829	58,010	59,200	66,044
1974	63,419	64,780	61,830	63,200	68,906
1975	65,733	67,237	64,228	65,700	72,046
1976	64,904	66,479	63,555	65,100	74,122
1977	66,025	67,715	64,785	66,500	76,349
1978	67,063	68,866	65,936	67,700	77,754
1979	67,774	69,681	66,764	68,600	78,670
1980	66,633	68,590	65,764	67,500	79,511

Note: The "Low" and "Best Fit" projections are based on an analysis of actual attendance rates 1962-1970; the new attendance rates begin with 1963 so that for 1971 the rate is 53.2 for "Low" and 54.1 for "Best Fit." The "Old" projection begins with the 1962 rate printed in the 1962 Report, 42.5, even though it was 2.6 under actual. These rates represent changes in the slope of the projection line as well as changes in the points from which the lines begin.

- "Low" is the low rate historically, but may be correct for the near future.
- "Best Fit" is the rate with the smallest deviations for the period 1962-1970; see Table V.
- "Old" is a revised projection starting with the 1962 old rate of 42.5 and incrementing 1.0 annually; this represents a change in attitude about college attendance.
- From page 25, Table III, Report of the Post-High School Education Study Commission (1962). Data for 1979 have been corrected and 1980 added.
- Page 31, Table 11, Parkhurst and Suddarth (1968).

The next most optimistic projection is the Best Fit based on the analysis of the 1962-1970 attendance rates in Table V. This projection would seem to be tenable if regional campus enrollments continued to grow at 8 or 9 percent and the private colleges just held at present levels with no further decline. Preliminary reports of 1971 application rates do not seem to support this possibility. Incidentally, the difference is so small between this projection and the Low and 1962 ones that the accuracy or preciseness here may be somewhat spurious. While mentioning this caveat it should be noted that the previous similarity between U.S. and Indiana population growth rates (18.5 for 1950-1960) no longer holds for the current period. Whereas the U.S. grew 13.3 percent, 1960-1970, Indiana population increased by only 11.4 percent. This difference spells growing problems in the forecasting of total freshman enrollments which include an unidentified component for non-residents.

Finally, and perhaps most realistic, is the projection which assumes a change in the attendance rate in 1963 to 1.0 from an earlier trend line based on a 1.1 rate. This is a modification of the series in the 1962 Post-High School Report. It also happens to be the most pessimistic (but only moderately so) of the projections yet assumes a very small fall-off in enrollments generally. For example, this projection would seem to indicate the possibilities of all the public main campuses having smaller freshman classes, a continuing decline in the private sector but moderate growth at the regional campuses. Since the freshmen at the main campuses increased only by one student in 1969-1970, a net decline may be immanent. Some higher education officials are unusually pessimistic and feel the poor job market for college graduates may have a long-run negative consequence which will reduce the attractiveness of even the regional campuses.

F. Summary and Conclusion

Perhaps the really important question deserving study is whether parents and high school students are downgrading the efficacy and value of a college education. Perhaps attendance at college is no longer something that 80 percent of middle class parents and children (Jencks and Riesman, 1968) assume to be a necessary prerequisite to adulthood and the world of work. Current research about college aspiration and enrollment (Waggaman, 1971) demonstrates rather decisively that positive expectations and encouragement by parents is almost a necessary prerequisite for college enrollment, regardless of class or family status.

The point was made often, not many years ago, that once we reached the 50 percent level of age-grade college attendance, we really could not expect large

college increases in the future, unless, of course, the college curriculum itself was redefined. This was predicated on the view that only the top 50 percent could be successful in the traditional liberal arts college. However, when we review the 1968 college attendance rates (Elliott, 1969) of high school graduates in such counties as Allen (71.5), Marion (68.9), Howard (68.0), Pulaski (66.5) and Dearborn (66.3), it is obvious that educational institutions which are within commuting distance may encourage college attendance. However, cost and income foregone continue to be intervening variables for prospective students; now poor job possibilities for graduates may also enter into the college attendance equation.

The process of making macro enrollment projections is ordinarily hazardous but with the possibility of so many changes in Indiana's higher education system they become even more necessary and artful. There are a number of procedures for constructing projections; one not used here involves the estimation by county of the percent of high school graduates who will attend college. This method requires a highly reliable college attendance ratio which, as the above discussion indicates, may be changing for the first time in a decade or so.

Current expectations and analysis of application rates between this and former months of May leads to the conclusion that a slower rate of growth in college attendance among 18-year-olds is almost certain. How much slower the rate may be, even though the number of freshmen enrolled should increase to 1979, will have to be examined in the Fall of each academic year.

G. References

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